

Supporting Statement

30 C.F.R. Part 75 – Safety Requirements for the Use of Diesel-Powered Equipment in Underground Coal Mines.

A. JUSTIFICATION

- 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

The Mine Safety and Health Administration (MSHA) has established standards and regulations for diesel-powered equipment in underground coal mines that will provide coal miners who work on and around diesel-powered equipment with important protections. The internal combustion engines that power diesel equipment expose miners to fire and explosion hazards in the confined environment of an underground coal mine, which contains combustible coal dust and highly explosive methane gas. Operation of diesel equipment in underground coal mines also presents potential health risks to miners from exposure to diesel exhaust emissions.

The regulations have various recordkeeping standards that address diesel fuel specifications; identification markings of fuel safety cans; inspection and maintenance of fire suppression systems; examinations and testing of diesel equipment; and the training and qualification of persons to work on and maintain diesel equipment.

These records are directly associated with the maintenance and use of this diesel equipment; the testing and maintenance of fire suppression systems on the equipment and at fueling stations; the safe storage, transportation and use of diesel fuel; and, exhaust gas sampling provisions to protect miners' health. The records are required to document that essential testing and maintenance of the equipment is done regularly and by qualified persons. Second, the safety requirements for diesel equipment include many of the proven features required in existing standards for electric-powered mobile equipment, such as cabs or canopies, methane monitors, brakes and lights. Third, sampling of diesel exhaust emissions is required to protect miners from overexposure to carbon monoxide and nitrogen dioxide contained in diesel exhaust.

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act) mandates that mine operators keep any records and make any reports that are reasonably necessary for MSHA to perform its duties under the Mine Act.

Recordkeeping requirements are found in:

§ 75.1901(a) – Diesel fuel requirements;

§ 75.1904(b)(4)(i) – Underground diesel fuel tanks and safety cans;

§ 75.1906(d) – Transport of diesel fuel;

§§ 75.1911(i) and (j) – Fire suppression systems for diesel-powered equipment and fuel transportation units;

§§ 75.1912(h) and (i) – Fire suppression systems for permanent underground diesel fuel storage facilities;

§§ 75.1914(f)(1), (f)(2), (g), (h)(1), and (h)(2) – Maintenance of diesel-powered equipment;

§§ 75.1915(a), (b)(5), (c), (c)(1), and (c)(2) – Training and qualification of persons working on diesel-powered equipment.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for new collections, indicate the actual use the agency has made of the information received from the current collection.

The respondents are underground coal mine operators. The recordkeeping requirements are necessary not only to assist MSHA in determining compliance, but also to provide useful information to mine operators and miners' representatives about the performance of diesel engines and any deterioration or defective condition needing corrective action. For example, the manufacturer's paperwork requirements provide important information about the exhaust output of a diesel engine and its ventilation needs. This information is valuable when selecting engines and for monitoring their performance in service. The regulation's paperwork requirements also help to identify deteriorating engine performance that indicates the need for equipment repair or maintenance, thus preventing overexposure of miners to the health hazards resulting from diesel exhaust. Because a number of information-reporting provisions are triggered when a defect is found on diesel-powered equipment, the information may also be used by miners' representatives to verify that necessary repairs have been made.

Provisions in part 75 establish mandatory safety standards for diesel-powered equipment for use in underground coal mines. These regulations also require routine sampling of toxic exhaust gases in specified areas, require the use of low sulfur diesel fuel to minimize exhaust emissions, and provide that diesel equipment maintenance

must be performed by persons who have been adequately trained for the task. In addition, these regulations include standards for storage, transportation and dispensing diesel fuel, and for the installation and maintenance of fire suppression systems on diesel equipment and in permanent underground fuel storage facilities.

The examinations associated with the requirements of these regulations must be performed on a regular basis. Less frequent examinations would not ensure that conditions requiring immediate attention would be promptly detected, such as inadequate air quantities ventilating diesel-powered equipment or equipment defects that create a hazard. Records of equipment examinations are required under the rule only when defects are found.

- 3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

The information gathered is required to be recorded, maintained for the period specified, and made accessible, upon request, to authorized representatives of the Secretary of Labor and miners' representatives. This may be done in a traditional manner by recording this information in a book or electronically by computer.

Recognizing that electronic storage and retrieval of information through computers is a common business practice, MSHA encourages the use of electronically stored records, provided they are secure and not susceptible to alteration, are able to capture the information and signatures required, and are accessible to the authorized representative of the Secretary and miners' representatives. "Secure" is intended to mean unalterable or cannot be modified. MSHA considers electronic records meeting these criteria to be practical and as reliable as traditional records.

- 4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose(s) described in Item 2 above.**

MSHA knows of no other Federal or State reporting requirement that would duplicate the reporting requirements contained in these regulations.

- 5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB form 83-I), describe the methods used to minimize burden.**

This information does not have a significant impact on small businesses or other small entities.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

The recordkeeping requirements contained in these regulations are the minimum necessary to ensure the safe and healthful operation of diesel-powered equipment in underground coal mines. The information requirements in these regulations not only serve as a means of verifying compliance with the regulations, but also provide important information to mine operators and miners' representatives about safety and health conditions in miners' workplaces. Reduction of these recordkeeping requirements would increase the likelihood that unsafe and unhealthy conditions would go undetected and uncorrected in underground coal mines.

Less frequent data gathering would not provide the monitoring necessary to ensure that dangerous conditions requiring immediate attention are identified and corrected.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- **requiring respondents to report information to the agency more often than quarterly;**
- **requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **requiring respondents to submit more than an original and two copies of any document;**
- **requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which**

unnecessarily impedes sharing of data with other agencies for compatible confidential use; or

- **requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

None of the labeling, training documents and records or testing and maintenance records required by the diesel equipment standards meet or exceed the above limits.

8. **If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to the comments. Specifically address comments received on cost and hour burden.**

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

In accordance with 5 C.F.R. § 1320.8 (d), MSHA will publish the proposed information collection requirements in the Federal Register, notifying the public that these information collection requirements are being reviewed in accordance with the Paperwork Reduction Act of 1995, and giving interested persons 60 days to submit comments.

9. **Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

MSHA does not provide payments or gifts to respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

All of the records required by the underground coal mine diesel equipment safety standards are for training, testing, and maintenance activities and contain no proprietary or confidential information. In addition, all of the records are maintained at the mine and are not submitted to MSHA. MSHA makes no assurance that the information will remain confidential.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

There are no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information.

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how this burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- **If the request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.**
- **Provide estimates of annualized costs to respondents for the hour burdens for collection of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.**

MSHA estimates that 213 respondents (164 large mines, 49 small mines) generate approximately 180,244 responses annually, resulting in an annual hour burden of approximately 42,826 hours. Calculations of the annual hour burden and the annual and annualized costs associated with that burden are detailed in the following sections.

Each of the reporting burden hour estimates includes the time for reviewing instructions, gathering and maintaining the necessary data, and completing the review of the information collection. These estimates use 2007 average wage rates for coal mine employees in the clerical classification earning \$26.37 per hour, miner classification earning \$33.70 per hour, and supervisory classification earning \$85.14 per hour. MSHA estimates, where contractor/specialized maintenance inspectors are utilized for compliance, an appropriate hourly rate, adjusted for inflation, is \$97.50 per hour.

Section 75.1901(a) requires that upon request, the mine operator must provide to an authorized representative of the Secretary evidence that the diesel fuel purchased for use in diesel-powered equipment underground meets the requirements in paragraph (a). The information requested in paragraph (a) is available on the purchase order when the mine operator purchases diesel fuel. MSHA estimates that mine operators purchase fuel once every two weeks. Further, MSHA estimates that half of all large and small mines do not keep gas purchasing orders on file. Thus, this provision affects approximately 82 large mines and 25 small mines. It is estimated to take 3 minutes (0.05 hours) to file the purchase order by a clerical person earning \$26.37 per hour.

Burden Hour Time to File Statement:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|---------------------|--------------------|--------------------|--------------|
| Mines | 82 | 25 | |
| Weeks/ Year | 25 | 20 | |
| Time to File (hrs) | 0.05 | 0.05 | |
| Annual Hours | 102.5 | 25 | 127.5 |

Burden Hour Annual Costs Related to Filing Statement:

| | |
|--------------------|--------------------|
| Annual Hours | 127.5 |
| Wages (per hour) | \$ 26.37 |
| Annual Cost | \$ 3,362.18 |

Section 75.1904(b)(4)(i) requires that underground diesel fuel tank connections be identified by conspicuous markings that specify the function. Large mines are estimated to have 4 tanks each and small mines are estimated to have 2 tanks each. About 656 tanks in large mines and 98 tanks in small mines require markings. It will take 2 minutes (0.0333 hours) to mark the connections at a wage rate of \$33.70 per hour. The markings will last for 2 years, and thus time and costs are annualized at 0.5.

Burden Hour Time to Mark Connections:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|---------------------------|--------------------|--------------------|--------------|
| Count of Tanks | 656 | 98 | |
| Hours to mark connections | 0.0333 | 0.0333 | |
| Annualizing rate | 0.5 | 0.5 | |
| Annual Hours | 10.92 | 1.63 | 12.55 |

Burden Hour Annualized Costs Related to Time to Mark Connections:

| | | |
|--------------------|-----------|---------------|
| Hourly Wage Rate | \$ | 33.70 |
| Total Hours | | 12.55 |
| Annual Cost | \$ | 422.94 |

Section 75.1906(d) requires that diesel fuel transportation unit tanks and safety cans be conspicuously marked as containing diesel fuel. Large mines are estimated to have 4 tanks each and small mines are estimated to have 2 tanks each. Further, each piece of mobile equipment is estimated to carry one safety can. About 5,003 tanks and safety cans at large mines and 579 tanks and safety cans at small mines require marking. It will take 2 minutes (0.0333 hours) to mark the tanks and safety cans at a wage rate of \$33.70 per hour. The markings will last for 2 years, and thus time and costs are annualized at 0.5.

Burden Hour Time to Mark Tanks and Safety Cans:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|--------------------------------|--------------------|--------------------|--------------|
| Count of Tanks and Safety Cans | 5,003 | 579 | |
| Hours to mark connections | 0.0333 | 0.0333 | |
| Annualizing rate | 0.5 | 0.5 | |
| Annual Hours | 83.30 | 9.64 | 92.94 |

Burden Hour Annualized Costs Related to Time to Mark Connections:

| | | |
|--------------------|-----------|-----------------|
| Hourly Wage Rate | \$ | 33.70 |
| Total Hours | | 92.94 |
| Annual Cost | \$ | 3,132.08 |

Sections 75.1911(i) and (j) When inspecting certain diesel machines, a record is required to be made for each fire suppression system inspection in which a defect was found. The record must include the machine examined, defect found, and corrective action taken. With respect to recordkeeping, of the inspections required by § 75.1911(i), MSHA estimates that 10 percent of the inspections will disclose a defect. Each record, including maintenance of the record, is estimated to take 5 minutes (0.0833 hours). Weekly inspections are estimated to take 15 minutes (0.25 hours) by a person earning

\$33.70 per hour; and manufacturer-recommended inspections are estimated to take 1 hour based upon a \$97.50 per hour inspection rate.

Weekly Inspection Burden Hour:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|--------------------------------|--------------------|--------------------|--------------|
| Equipment Count | 4,812 | 493 | |
| Inspections/ Year | 50 | 40 | |
| Inspections finding defects | 10% | 10% | |
| Inspection Time (hrs) | 0.25 | 0.25 | |
| Annual Inspection Hours | 6,015 | 493 | 6,508 |

Weekly Inspection Recordkeeping Burden Hours:

| | |
|--|--------------|
| Recordkeeping time for defective equipment (hours) | 0.08333 |
| Inspections disclosing defects | 26,032 |
| Annual Recordkeeping Hours | 2,169 |

Burden Hour Annual Costs Related to Weekly Inspections:

| | |
|----------------------------------|----------------------|
| Weekly Inspection Hours per year | 6,508 |
| Wages per hour (miner) | \$ 33.70 |
| Annual Inspection Cost | \$ 219,319.60 |

Weekly Inspection Recordkeeping Annual Burden Hours:

| | |
|----------------------------------|---------------------|
| Annual Recordkeeping Hours | 2,169 |
| Hourly Clerical Rate | \$ 26.37 |
| Annual Recordkeeping Cost | \$ 57,196.53 |

Manufacturer-Recommended Inspections Burden Hours

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|--------------------------------|--------------------|--------------------|--------------|
| Pieces of Diesel Equipment | 4,812 | 493 | |
| Inspections per Year | 2 | 2 | |
| Hours per Inspection | 1 | 1 | |
| Inspections finding defects | 10% | 10% | |
| Annual Inspection Hours | 962.4 | 98.6 | 1,061 |

Manufacturer-Recommended Inspection Recordkeeping Burden Hours:

| | |
|---|-------------|
| Record-keeping time for defective equipment (hours) | 0.08333 |
| Inspections disclosing defects | 1,061 |
| Annual Recordkeeping Hours | 88.4 |

Burden Hour Annual Costs Related to Inspection Burden Hour Time for Manufacturer-Recommended Inspections:

| | |
|-------------------------------|----------------------|
| Annual Inspection Hours | 1,061 |
| Hourly Wage Rate | \$ 97.50 |
| Annual Inspection Cost | \$ 103,447.50 |

Annual Costs Related to Manufacturer-Recommended Inspection Recordkeeping Burden Hours:

| | |
|----------------------------------|--------------------|
| Annual Recordkeeping Hours | 88.4 |
| Clerical Rate (hourly) | \$ 26.37 |
| Annual Recordkeeping Cost | \$ 2,331.11 |

Sections 75.1912(h) and (i) When inspecting permanent diesel fuel storage facilities underground, a record is required for each fire suppression system in which a defect was found. The record must include the facility examined, defect found, and corrective action taken. MSHA estimates that 30% of all large mines ($0.30 \times 164 = 49$) maintain permanent underground diesel fuel storage facilities but only 5% of small mines ($0.05 \times 49 = 2$) maintain permanent underground diesel storage facilities. With respect to recordkeeping for the inspections done in § 75.1912(h), MSHA estimates that 10% of the inspections will disclose a defect. Each record, including maintenance of the record, is estimated to take 5 minutes (0.0833 hrs). Weekly inspections are estimated to take 30 minutes (0.5 hours) by a person earning \$33.70 per hour. Manufacturer-recommended inspections are estimated to take 1 hour, twice yearly, with a \$97.50 per hour inspection rate.

Inspection Burden Hour Time For Weekly Inspections:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|---|--------------------|--------------------|--------------|
| Storage Facilities | 49 | 2 | |
| Inspections per Year | 50 | 40 | |
| Portion of inspections disclosing defects | 10% | 10% | |
| Hours per Inspection | 0.5 | 0.5 | |
| Annual Inspection Hours | 122.5 | 4 | 126.5 |

Weekly Inspection Recordkeeping Burden Hours:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|-----------------------------------|--------------------|--------------------|--------------|
| Storage Facilities | 49 | 2 | |
| Weeks per Year | 50 | 40 | |
| Inspections finding defects | 10% | 10% | |
| Recordkeeping hours | 0.08333 | 0.08333 | |
| Annual Recordkeeping Hours | 20.4 | 0.1 | 20.5 |

Burden Hour Annual Costs Related to Inspection Burden Hour Time from Weekly Inspections:

| | |
|-------------------------------|--------------------|
| Annual Inspection Time | 126.5 |
| Hourly Wage Rate (Miner) | \$ 33.70 |
| Annual Inspection Cost | \$ 4,263.05 |

Burden Hour Annual Costs Related to Weekly Inspection Recordkeeping Burden Hours:

| | |
|----------------------------------|------------------|
| Annual Hours | 20.4 |
| Hourly Wage Rate (Clerical) | \$ 26.37 |
| Annual Recordkeeping Cost | \$ 540.59 |

Inspection Burden Hour Time for Manufacturer-Recommended Inspections:

| | |
|--------------------------------|------------|
| Storage Facilities | 51 |
| Inspections per Year | 2 |
| Hours per Inspection | 1 |
| Annual Inspection Hours | 102 |

Manufacturer-Recommended Inspection Recordkeeping Burden Hours:

| | |
|-----------------------------------|-------------|
| Storage Facilities | 51 |
| Inspections per Year | 2 |
| Inspections finding defects | 10% |
| Recordkeeping Hours | 0.08333 |
| Annual Recordkeeping Hours | 0.85 |

Burden Hour Annual Costs Related to Inspection Burden Hour Time for Manufacturer-Recommended Inspections:

| | |
|-------------------------------|-------------------|
| Annual Inspection Hours | 102 |
| Hourly Wage Rate | \$ 97.50 |
| Annual Inspection Cost | \$9,945.00 |

Burden Hour Annual Costs Related to Manufacturer-Recommended Inspection Recordkeeping Burden Hours:

| | |
|----------------------------------|-----------------|
| Annual Recordkeeping Hours | 0.85 |
| Wage Rate | \$ 26.37 |
| Annual Recordkeeping Cost | \$ 22.41 |

Sections 75.1914(f)(1), (f)(2), and (h) require that weekly examinations be performed on diesel-powered equipment. Only the results of those examinations disclosing a defect must be recorded. The record must include the machine examined, defect found, and corrective action taken. MSHA estimates that it will take 2 hours to examine permissible equipment, 30 minutes (0.5 hours) to examine non-permissible heavy-duty equipment, and 15 minutes (0.25 hours) to examine non-permissible light-duty

equipment. MSHA estimates that 25% of the time an examination will show a defect. There are 5,305 pieces of existing permissible and non-permissible diesel-powered equipment, of which 4,812 pieces are in large mines and 493 pieces are in small mines. Of the 4,812 pieces in large mines, 412 pieces are permissible, 1,033 are non-permissible heavy-duty pieces, and 3,367 are non-permissible light-duty pieces. Of the 493 pieces in small mines, 35 pieces are permissible, 90 are non-permissible heavy-duty pieces, and 368 are non-permissible light-duty pieces. Exams are conducted once per workweek, with 50 workweeks per year. Labor is valued at \$33.70 per hour. MSHA estimates that it takes 5 minutes (or 0.0833 hours) for each record, including maintenance of records as required by paragraph (h).

Recordkeeping Burden Hours:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>TOTAL</i> |
|-----------------------------------|--------------------|--------------------|--------------|
| Permissible Pieces | 412 | 35 | |
| Non-permissible Heavy Duty Pieces | 1,033 | 90 | |
| Non-permissible Light Duty Pieces | 3,367 | 368 | |
| Inspections per year | 50 | 40 | |
| Inspections finding defects | 25% | 25% | |
| Recordkeeping hours | 0.08333 | 0.08333 | |
| Annual Recordkeeping Hours | 5,012 | 411 | 5,423 |

Recordkeeping Burden Hour Annual Costs:

| | |
|----------------------------------|----------------------|
| Annual Recordkeeping Hours | 5,423 |
| Hourly Wage Rate (Clerical) | \$ 26.37 |
| Annual Recordkeeping Cost | \$ 143,004.51 |

Sections 75.1914(g) and (h) require mine operators to develop, in writing, standard operating procedures for testing undiluted diesel exhaust emissions. To account for new mines, which will require the development of these standard operating procedures, an average life of 5 years for large mines and an average life for small mines of 2 years is used to estimate that 13 large mines will start up annually and 23 small mines will open per year. It is estimated to take 2 hours of a supervisor's time (valued at \$ 85.14 per hour) to develop and maintain the testing procedures as required by paragraphs (g) and (h). Written procedures are similar for diesel-powered equipment that is of the same model, but will vary when the diesel machines are different models. On average, there are about 8 different diesel machine models in large mines and about 2 different models in small mines.

Burden Hours for Program to Test Undiluted Diesel Exhaust Emissions

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|-----------------------------|--------------------|--------------------|--------------|
| New Mines | 15 | 12 | |
| Equipment Models | 8 | 2 | |
| Hours to develop procedures | 2 | 2 | |
| Annual Hours | 240 | 48 | 288 |

Burden Hour Annual Costs for Program to Test Undiluted Diesel Exhaust Emissions

| | |
|--------------------|---------------------|
| Annual Hours | 288 |
| Hourly Wage Rate | \$ 85.14 |
| Annual Cost | \$ 24,520.32 |

Sections 75.1914(g)(5) and (h) require that records be kept of weekly exams and tests of the undiluted exhaust emissions on certain pieces of diesel-powered equipment. This test is done on 1,445 diesel machines in large mines (412 permissible and 1,033 heavy-duty) and on 125 diesel machines in small mines (35 permissible and 90 heavy-duty). For each piece of tested equipment, it takes 10 minutes (0.1667 hour) to set up and do the test by a miner earning \$33.70 per hour and 5 minutes (0.0833 hour) to make and retain the record required by paragraphs (g)(5) and (h) by a clerical worker earning \$26.37 per hour.

Because of this provision, mines will need to purchase equipment. Equipment costs for this provision appear in Item 13.

Exam Burden Hours:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|--------------------------|--------------------|--------------------|---------------|
| Permissible Equipment | 412 | 35 | |
| Heavy Duty Equipment | 1,033 | 90 | |
| Exams/ Year | 50 | 40 | |
| Hours per Exam | 0.1667 | 0.1667 | |
| Annual Exam Hours | 12,044 | 834 | 12,878 |

Burden Hour Annual Costs for Exams:

| | |
|-------------------------|----------------------|
| Annual Exam Hours | 12,278 |
| Hourly Wage Rate | \$ 33.70 |
| Annual Exam Cost | \$ 433,988.60 |

Recordkeeping Burden Hours:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|-----------------------------------|--------------------|--------------------|--------------|
| Pieces of Equipment | 1,445 | 125 | |
| Exams/Year | 50 | 40 | |
| Recordkeeping hours | 0.08333 | 0.08333 | |
| Annual Recordkeeping Hours | 6,021 | 417 | 6,438 |

Burden Hour Annual Costs for Recordkeeping Burden Hours:

| | |
|----------------------------------|----------------------|
| Annual Recordkeeping Hours | 6,438 |
| Hourly Wage Rate | \$ 26.37 |
| Annual Recordkeeping Cost | \$ 169,770.06 |

Section 75.1915(a) requires that training be provided to qualify persons to perform maintenance, repairs, examinations, and tests on diesel-powered equipment. The burden hours to develop such a training program are set forth under § 75.1915(b)(5). Section 75.1915(a) concerns the burden hours related to the mine operator providing the training. MSHA estimates that 5 hours of training is provided by an instructor on each type of diesel-powered equipment in the mine. The supervisor's wage is \$85.14 per hour. MSHA determined that, on the average, there are 8 different kinds of diesel-powered equipment in a large mine and 2 kinds in a small mine. The training is provided on an annual basis to account for miner turnover.

Burden Hours Related to Training:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|--------------------------|--------------------|--------------------|--------------|
| No. of Mines | 164 | 49 | |
| Training hours | 5 | 5 | |
| Types of Diesel Machines | 8 | 2 | |
| Annual Hours | 6,560 | 490 | 7,050 |

Burden Hour Cost Related to Training:

| | |
|--------------------|----------------------|
| Annual Hours | 7,050 |
| Hourly Wage Rate | \$ 85.14 |
| Annual Cost | \$ 600,237.00 |

Sections 75.1915(b)(5) and (c) require that the mine operator develop an initial and retraining program to qualify persons to perform maintenance, repairs, examinations, and tests on diesel-powered equipment. Paragraph (c) sets forth requirements concerning the records to be made and maintained. MSHA estimates that 13 new large mines per year and 23 new small mines per year will begin operation and require the development of a training program. It takes 16 hours in a large mine and 10 hours in a small mine to develop and maintain the training program as required by paragraphs (b)(5) and (c). The plan is developed by a supervisor earning \$85.14 per hour.

Development of Training Plan Burden Hours after the First Year:

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>Total</i> |
|---------------------|--------------------|--------------------|--------------|
| New Mines each Year | 13 | 23 | |
| Hours for program | 16 | 10 | |
| Annual Hours | 208 | 230 | 438 |

Burden Hour Cost of Plan

| | |
|--------------------|---------------------|
| Annual Hours | 438 |
| Hourly Wage Rate | \$ 85.14 |
| Annual Cost | \$ 37,291.32 |

Summary of Burden Hours

| | <i>Total Responses</i> | <i>Total Hours</i> |
|--|------------------------|--------------------|
| 75.1901 - Proof of diesel fuel purchase | 2,550 | 127.5 |
| 75.1904(b)(4)(i) - Marking of diesel fuel tanks | 752 | 13.88 |
| 75.1906(d) - Transport of diesel fuel | 5,582 | 92.94 |
| 75.1911(i) - Diesel machine inspections - weekly (fire suppression system) | 26,032 | 8,677 |
| 75.1911(i) - Diesel machine inspections - manufacturer-recommended (fire suppression system) | 1,061 | 1,149.4 |
| 75.1912(h) & (i) - Fire suppression system - weekly (diesel fuel storage) | 253 | 147 |
| 75.1912(h) & (i) - Fire suppression system - manufacturer-recommended (diesel fuel storage) | 102 | 103 |
| 75.1914(f) - Weekly exams of diesel equipment | 65,080 | 5,423 |
| 75.1914(g) & (h) - Testing procedures (exhaust) | 144 | 288 |
| 75.1914(g)(5) - Records of weekly exams (exhaust) | 77,250 | 19,316 |
| 75.1915(a) - Training | 1,410 | 7,050 |
| 75.1915(b)(5) - Re-training program development | 36 | 438 |
| TOTALS | 180,252 | 42,825.72 |

Summary of Cost Burden

| | <i>Total Cost</i> |
|--|-----------------------|
| 75.1901 - Proof of diesel fuel purchase | \$ 3,362.18 |
| 75.1904(b)(4)(i) - Marking of diesel fuel tanks | \$ 467.76 |
| 75.1906(d) - Transport of diesel fuel | \$ 3,132.09 |
| 75.1911(i) - Diesel machine inspections - weekly | \$ 276,516.13 |
| 75.1911(i) - Diesel machine inspections - manufacturer | \$ 105,778.61 |
| 75.1912(h) & (i) - Fire suppression system - weekly | \$ 4,803.64 |
| 75.1912(h) & (i) - Fire suppression system - manufacturer | \$ 9,967.41 |
| 75.1914(f) - Weekly exams of equipment | \$ 182,693.23 |
| 75.1914(g) & (h) - Emissions testing procedures | \$ 24,520.32 |
| 75.1914(g)(5) - Records of weekly exams | \$ 603,758.66 |
| 75.1915(a) - Training | \$ 600,237.00 |
| 75.1915(b)(5) - Re-training program development | \$ 37,291.32 |
| TOTALS | \$1,852,528.35 |

13. Provide an estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

- **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
- **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**

- **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

Section 75.1914(g)(5) and (h) To make records from weekly exams and tests of the undiluted exhaust emissions required by § 75.1914(g)(5) and (h), mine operators will need to purchase an instantaneous gas analyzer that costs about \$2,000 per instrument. All 164 large mines and 49 small mines are affected. The large mines have two analyzers and the small mines require one unit. The sampling devices last 10 years, and costs are annualized at 0.142 (annualized cost of \$284 each). The devices are maintained and calibrated at a cost of \$852 per year each.

| | <i>Large Mines</i> | <i>Small Mines</i> | <i>TOTALS</i> |
|---------------------------|--------------------|--------------------|-------------------|
| Mines | 164 | 49 | 213 |
| Units per Mine | 2 | 1 | |
| Annualized Equipment Cost | \$ 93,152 | \$ 13,916 | \$ 107,068 |
| Annual Calibration Cost | \$ 279,456 | \$ 41,748 | \$ 321,204 |
| TOTAL Annual Cost | \$ 372,608 | \$ 55,664 | \$ 428,272 |

- 14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.**

None of the records in this information collection review are submitted to MSHA for review or approval. The records are examined during normal mandatory inspections and do not significantly add to the time required to conduct those mandatory inspections. Therefore, there is no cost to the Federal government (MSHA) directly associated with these record keeping requirements.

- 15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.**

Respondents and Responses: The number of respondents increased from 181 to 213. The increase is due to a greater number of mines using underground diesel-powered equipment (from 181 to 213). In addition, this package now calculates the cost burden of

the requirement that diesel fuel tanks and safety cans be conspicuously marked, increasing the number of responses by 5,582. The increase in respondents and the inclusion of the marking requirement led directly to an increase of 32,677 responses (from 147,567 to 180,252).

Hours: There has been a decrease of 101,701 hours in the hour burden (from 144,527 hours to 42,826 hours). MSHA no longer includes the burden hours associated with conducting the weekly examinations of diesel-powered equipment, only the recordkeeping hours incurred when a defect is discovered during those examinations.

Costs: The cost burden increased by \$78,384, a direct result of the increase in the number of underground coal mines using diesel-powered equipment.

- 16. For collections of information whose results are planned to be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

The information collections required by this rule are not scheduled for publication.

- 17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

Not applicable.

- 18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.**

There are no certification exceptions identified with the information collection requirements included in this rule.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 17 on the Form OMB 83-I is checked "Yes", the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed:

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**
- 2. Describe the procedures for the collection of information including:**
 - Statistical methodology for stratification and sample selection,**
 - Estimation procedure,**
 - Degree of accuracy needed for the purpose described in the justification,**
 - Unusual problems requiring specialized sampling procedures, and**
 - Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**
- 3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.**
- 4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**

5. **Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other persons(s) who will actually collect and/or analyze the information for the agency.**

As statistical analysis is not required by the regulations, questions 1 through 5 do not apply.

**Federal Mine Safety & Health Act of 1977,
Public Law 91-173,
as amended by Public Law 95-164**

An Act

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That this Act may be cited as the "Federal Mine Safety and Health Act of 1977".

INSPECTIONS, INVESTIGATIONS, AND RECORDKEEPING

SEC. 103.

(h) In addition to such records as are specifically required by this Act, every operator of a coal or other mine shall establish and maintain such records, make such reports, and provide such information, as the Secretary or the Secretary of Health, Education, and Welfare may reasonably require from time to time to enable him to perform his functions under this Act. The Secretary or the Secretary of Health, Education, and Welfare is authorized to compile, analyze, and publish, either in summary or detailed form, such reports or information so obtained. Except to the extent otherwise specifically provided by this Act, all records, information, reports, findings, citations, notices, orders, or decisions required or issued pursuant to or under this Act may be published from time to time, may be released to any interested person, and shall be made available for public inspection.

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2004]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1901]

[Page 596]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES-- Table of Contents

Subpart T: Diesel-Powered Equipment

Sec. 75.1901 Diesel fuel requirements.

- (a) Diesel-powered equipment shall be used underground only with a diesel fuel having a sulfur content no greater than 0.05 percent and a flash point of 100 [deg]F (38 [deg]C) or greater. Upon request, the mine operator shall provide to an authorized representative of the Secretary evidence that the diesel fuel purchased for use in diesel-powered equipment underground meets these requirements.

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2004]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1904]

[Page 597-598]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES-- Table of Contents

Subpart T: Diesel-Powered Equipment

Sec. 75.1904 Underground diesel fuel tanks and safety cans.

- (b) Underground diesel fuel tanks must be provided with--
 - (4) Liquid tight connections for all tank openings that are--
 - (i) Identified by conspicuous markings that specify the function; and
 - (ii) Closed when not in use.

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2004]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1911]

[Page 603-604]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES-- Table of Contents

Subpart T: Diesel-Powered Equipment

Sec. 75.1911 Fire suppression systems for diesel-powered equipment and fuel transportation units.

- (i) Each fire suppression system shall be tested and maintained in accordance with the manufacturer's recommended inspection and maintenance program and as required by the nationally recognized independent testing laboratory listing or approval, and be visually inspected at least once each week by a person trained to make such inspections.
- (j) Recordkeeping. Persons performing inspections and tests of fire suppression systems under paragraph (i) shall record when a fire suppression system does not meet the installation or maintenance requirements of this section.

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2004]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1912]

[Page 604-605]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES-- Table of Contents

Subpart T: Diesel-Powered Equipment

Sec. 75.1912 Fire suppression systems for permanent underground diesel fuel storage facilities.

- (h) Each fire suppression system shall be tested and maintained in accordance with the manufacturer's recommended inspection and maintenance program and as required by the nationally recognized independent testing laboratory listing or approval, and be visually inspected at least once each week by a person trained to make such inspections.
- (i) Recordkeeping. Persons performing inspections and tests of fire suppression systems under paragraph (h) shall record when a fire suppression system does not meet the installation or maintenance requirements of this section.
 - (1) The record shall include the facility whose fire suppression system did not meet the installation or maintenance requirements of this section, the defect found, and the corrective action taken.
 - (2) Records are to be kept manually in a secure manner not susceptible to alteration or recorded electronically in a secured computer system that is not susceptible to alteration.

- (3) Records shall be maintained at a surface location at the mine for one year and made available for inspection by an authorized representative of the Secretary and miners' representatives.

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2004]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1914]

[Page 605-606]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES-- Table of Contents

Subpart T: Diesel-Powered Equipment

Sec. 75.1914 Maintenance of diesel-powered equipment.

- (f) All diesel-powered equipment shall be examined and tested weekly by a person qualified under Sec. 75.1915.
 - (1) Examinations and tests shall be conducted in accordance with approved checklists and manufacturers' maintenance manuals.
 - (2) Persons performing weekly examinations and tests of diesel-powered equipment under this paragraph shall make a record when the equipment is not in approved or safe condition. The record shall include the equipment that is not in approved or safe condition, the defect found, and the corrective action taken.

- (g) Undiluted exhaust emissions of diesel engines in diesel-powered equipment approved under part 36 and heavy-duty nonpermissible diesel-powered equipment as defined in Sec. 75.1908(a) in use in underground coal mines shall be tested and evaluated weekly by a person who is trained to perform this task. The mine operator shall develop and implement written standard operating procedures for such testing and evaluation that specify the following:
 - (5) The maintenance of records necessary to track engine performance.

- (h) Recordkeeping. Records required by paragraphs (f)(2) and (g)(5) shall be—
- (1) Recorded in a secure book that is not susceptible to alteration, or recorded electronically in a computer system that is secure and not susceptible to alteration; and
 - (2) Retained at a surface location at the mine for at least 1 year and made available for inspection by an authorized representative of the Secretary and by miners' representatives.

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2004]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1915]

[Page 606-607]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES-- Table of Contents

Subpart T: Diesel-Powered Equipment

Sec. 75.1915 Training and qualification of persons working on diesel-powered equipment.

- (a) To be qualified to perform maintenance, repairs, examinations and tests on diesel-powered equipment, as required by Sec. 75.1914, a person must successfully complete a training and qualification program that meets the requirements of this section. A person qualified to perform these tasks shall be retrained as necessary to maintain the ability to perform all assigned diesel-powered equipment maintenance, repairs, examinations and tests.
- (b) A training and qualification program under this section must:
 - (5) Be in writing. The written program shall include a description of the course content, materials, and teaching methods for initial training and retraining.
- (c) Recordkeeping. The operator shall maintain a copy of the training and qualification program required by this section and a record of the names of all persons qualified under the program.
 - (1) The record of the names of qualified persons shall be made in a manner that is not susceptible to alteration, or recorded electronically in a computer system that is secure and not susceptible to alteration.

- (2) The training and qualification program and record of qualified persons are to be kept at surface location of the mine and made available for inspection by an authorized representative of the Secretary and by miners' representatives.